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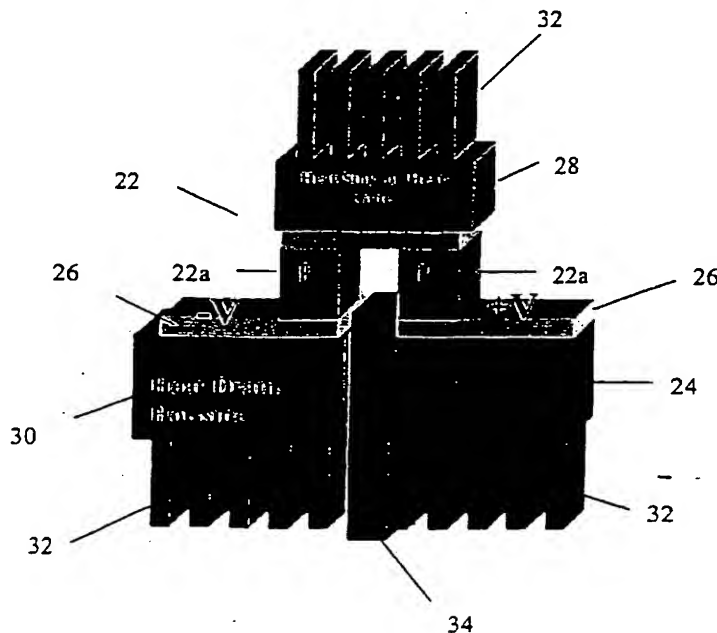
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(54) Title: TRANS-THERMOELECTRIC DEVICE



(57) Abstract: A thermoelectric device having at least one unipolar couple element (22) including two legs (22a) of a same electrical conductivity type. A first-temperature stage (24) is connected to one of the two legs. A second-temperature stage (28) is connected across the legs of the at least one unipolar couple element. A third-temperature stage (30) is connected to the other of the two legs. Methods for cooling an object and for thermoelectric power conversion utilize the at least one unipolar couple element to respectively cool an object and produce electrical power.

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